

WHAT IS CLAIMED IS:

1. A method of implementing forward compatibility hooks within 802.11h communication systems via formatting at least one 802.11h symbol field, the at least one 802.11h symbol field selected from the group consisting of a supported channels element, a channel switch announcement element, a basic/CCA/RPI histogram request, and a basic/CCA/RPI histogram response.
2. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises extending an 802.11h algorithm, wherein the 802.11h algorithm is defined by a $5\text{MHz} \cdot N$ formula used to implement 802.11h communications, wherein N is an offset, and further wherein extending the 802.11h algorithm comprises adding negative N 's.
3. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises the steps of:
 - providing a table defining channel numbers for each desired band; and
 - defining each frequency in response to a band number and an associated channel number.
4. The method according to claim 3, wherein the desired bands are defined as a 2.4 MHz band, a U-NII US lower, middle and upper band, and a Japanese band having a center frequency at 4.9 GHz.
5. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h supported channels element to include a one octet band field.
6. The method according to claim 5, wherein the one octet band field has only the value "5", indicating the 5 GHz band.

7. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h channel switch announcement element to include a one octet new band field.
8. The method according to claim 7, wherein the one octet channel switch announcement element new band field has only the value “5”, indicating the 5 GHz band.
9. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h basic request element to include a one octet band field.
10. The method according to claim 9, wherein the one octet basic request element band field has only the value “5”, indicating the 5 GHz band.
11. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h CCA request element to include a one octet band field.
12. The method according to claim 11, wherein the one octet CCA request element band field has only the value “5”, indicating the 5 GHz band.
13. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h RPI histogram request element to include a one octet band field.
14. The method according to claim 13, wherein the one octet RPI histogram request element band field has only the value “5”, indicating the 5 GHz band.
15. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h basic response element to include a one octet band field.

16. The method according to claim 15, wherein the one octet basic response element band field has only the value “5”, indicating the 5 GHz band.

17. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h CCA response element to include a one octet band field.

18. The method according to claim 17, wherein the one octet CCA response element band field has only the value “5”, indicating the 5 GHz band.

19. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h RPI histogram response element to include a one octet band field.

20. The method according to claim 19, wherein the one octet RPI histogram response element band field has only the value “5”, indicating the 5 GHz band.

21. The method according to claim 1, wherein the formatting at least one 802.11h symbol field comprises formatting the 802.11h basic report element to include one additional byte in its map field.

22. The method according to claim 21, wherein the one additional byte comprises solely reserved bits.

23. The method according to claim 21, wherein the one additional byte comprises bits that deliver new information that becomes relevant when using DFS and/or TPC mechanisms in other regulatory domains and frequency bands and for other purposes.

24. A method of implementing forward compatibility hooks within 802.11h communication systems via using the same formatting of 802.11h symbol field selected from the group consisting of a supported channels element, a channel switch announcement element, a basic/CCA/RPI histogram request, and a basic/CCA/RPI histogram response, in new frequency bands.
25. The method according to claim 24, wherein the new frequency bands comprise the 2.4GHz ISM band.
26. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same supported channels element with the same 26 byte supported channels field wherein these bytes are used to map channels in the new frequency bands.
27. The method according to claim 26, wherein the new frequency bands comprise the 2.4GHz band.
28. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same channel switch announcement element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.
29. The method according to claim 28, wherein the new frequency bands comprise the 2.4GHz band.
30. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same basic request element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.
31. The method according to claim 30, wherein the new frequency bands comprise the 2.4GHz band.

32. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same basic response element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.

33. The method according to claim 32, wherein the new frequency bands comprise the 2.4GHz band.

34. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same CCA request element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.

35. The method according to claim 34, wherein the new frequency bands comprise the 2.4GHz band.

36. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same CCA response element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.

37. The method according to claim 36, wherein the new frequency bands comprise the 2.4GHz band.

38. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same RPI histogram request element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.

39. The method according to claim 38, wherein the new frequency bands comprise the 2.4GHz band.

40. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same RPI histogram response element with the same 1 octet channel number field wherein this octet is used to map channels in the new frequency bands.

41. The method according to claim 40, wherein the new frequency bands comprise the 2.4GHz band.

42. The method according to claim 24, wherein the using the same 802.11h symbol field comprises using the same basic response element with the same basic report map field wherein this field is used for indications in the new frequency bands.

43. The method according to claim 42, wherein the new frequency bands comprise the 2.4GHz band.